



US005,931,870A

United States Patent [19]

Cuckler et al.

[11] Patent Number: **5,931,870**[45] Date of Patent: **Aug. 3, 1999**[54] **ACETABULAR RING PROSTHESIS WITH REINFORCEMENT BUTTRESS**

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[21] Appl. No.: **08/727,948**[22] Filed: **Oct. 9, 1996**

[51] Int. Cl.⁶ **A61F 2/02; A61F 2/30;**
A61F 2/34; A61F 2/36

[52] U.S. Cl. **623/16; 623/18; 623/22;**
623/23; 623/20; 623/19; 623/21

[58] Field of Search **623/16, 18, 19-23**

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[57] **ABSTRACT**

A cemented acetabular prosthesis includes a cup body having a relative thin wall (for example, 2 mm). The body has a concave surface, a convex surface, and an annular rim. A plastic liner registers into a concavity of the cup body, the liner having a wall with a liner wall thickness much greater than the cup body wall thickness and a concave surface and a convex surface that registers and fits the concave surface of the cup body. The cup body wall provides a plurality of openings. Some of the openings are bone screw receptive openings that are reinforced with an annular reinforcement that extends away from the convex surface of the cup body. Other openings are unreinforced openings that allow cement to flow from the concave to the convex side of the cup body and into the patient's acetabulum during surgery. The cup body has a peripheral buttress portion for supporting a volume of cement of the cement mantle at a peripheral interface position between the liner and the body.

46 Claims, 7 Drawing Sheets